REGULATIONS GOVERNING THE LICENSING AND USE OF FREQUENCIES IN THE 5850–5925 MHZ BAND FOR DEDICATED SHORT-RANGE COMMUNICATIONS SERVICE (DSRCS)

### § 90.371 Dedicated short range communications service.

(a) These provisions pertain to systems in the 5850–5925 MHz band for Dedicated Short-Range Communications Service (DSRCS). DSRCS systems use radio techniques to transfer data over short distances between roadside and mobile units, between mobile units, and between portable and mobile units to perform operations related to the improvement of traffic flow, traffic safety, and other intelligent transportation service applications in a variety of environments. DSRCS systems may also transmit status and instructional messages related to the units involved. DSRCS Roadside Units are authorized under this part. DSRCS On-Board Units are authorized under part 95 of this chapter.

(b) DSRCS Roadside Units (RSUs) operating in the band 5850–5925 MHz shall not receive protection from Government Radiolocation services in operation prior to the establishment of the DSRCS station. Operation of DSRCS RSU stations within 75 kilometers of the locations listed in the table below must be coordinated through the National Telecommunications and Information Administration.

| Location | Latitude | Longitude |
|---|---|---|
| Ft. Lewis, WA | 470525N | 1223510W |
| Yakima Firing Center, WA | 464018N | 1202135W |
| Ft. Carson, CO | 383810N | 1044750W |
| Ft. Riley, KS | 385813N | 0965139W |
| Ft. Shafter, HI | 211800N | 1574900W |
| Hunter Army Airfield, GA | 320100N | 0810800W |
| Ft. Gillem, GA | 333600N | 0841900W |
| Ft. Benning, GA | 322130N | 0845815W |
| Ft. Stewart, GA | 315145N | 0813655W |
| Ft. Rucker, AL | 311947N | 0854255W |
| Yuma Proving Grounds, AZ | 330114N | 1141855W |
| Ft. Hood, TX | 310830N | 0974550W |
| Ft. Knox, KY | 375350N | 0855655W |
| Ft. Bragg, NC | 350805N | 0790035W |
| Ft. Campbell, KY | 363950N | 0872820W |
| Ft. Polk, LA | 310343N | 0931226W |
| Ft. Leonard Wood, MO | 374430N | 0920737W |
| Ft. Irwin, CA | 351536N | 1164102W |
| Ft. Sill, OK | 344024N | 0982352W |
| Ft. Bliss, TX | 314850N | 1062533W |
| Ft. Leavenworth, KS | 392115N | 0945500W |
| Ft. Drum, NY | 440115N | 0754844W |
| Ft. Gordon, GA | 332510N | 0820910W |
| Ft. McCoy, WI | 440636N | 0904127W |
| Ft. Dix, NJ | 400025N | 0743713W |
| Parks Reserve Forces Training Area, CA. | 374254N | 1214218W |
| Ft. Hunter Ligget, CA | 355756N | 1211404W |
| Pacific Missile Test Center, CA. | 340914N | 1190524W |
| Naval Air Development Center, PA. | 401200N | 0750500W |
| Mid-Atlantic Area Frequency Coordinator, MD. | 381710N | 0762500W |
| Naval Research Laboratory, MD. | 383927N | 0763143W |
| Naval Ocean Systems Center, CA. | 324500N | 1171000W |
| Naval Research Laboratory, DC. | 385500N | 0770000W |
| Naval Surface Weapons Center, MD. | 390205N | 0765900W |
| Naval Electronic Systems Engineering Activity, MD. | 381000N | 0762300W |
| Midway Research Center, VA | 382640N | 0772650W |
| Aberdeen Proving Ground, MD. | 392825N | 0760655W |
| Ft. Huachuca, AZ | 313500N | 1102000W |
| Ft. Monmouth, NJ | 401900N | 0740215W |
| Picatinny Arsenal, NJ | 405600N | 0743400W |
| Redstone Arsenal, AL | 343630N | 0863610W |
| White Sands Missile Range, NM. | 322246N | 1062813W |
| Army Research Laboratory, MD. | 390000N | 0765800W |
| Space and Missile Systems Center, CA. | 335500N | 1182200W |
| Edwards AFB, CA | 345400N | 1175200W |
| Patrick AFB, FL | 281331N | 0803607W |
| Eglin AFB, FL | 302900N | 0863200W |
| Holloman AFB, NM | 322510N | 1060601W |
| Kirtland AFB, NM | 350230N | 1063624W |
| Griffiss AFB, NY | 431315N | 0752431W |
| Wright-Patterson AFB, OH | 394656N | 0840539W |
| Hanscom AFB, MA | 422816N | 0711725W |
| Nellis AFB, NV | 361410N | 1150245W |
| Vandenberg AFB, CA | 344348N | 1203436W |
| U.S. Air Force Academy, CO | 385800N | 1044900W |
| Brooks AFB, TX | 292000N | 0982600W |
| Arnold AFB, TN | 352250N | 0860202W |
| Tyndall AFB, FL | 300412N | 0853436W |
| Charles E. Kelly Support Facility—Oakdale, PA. | 402357N | 0800925W |

(c) NTIA may authorize additional Government Radiolocation services. Once a new Federal assignment is made, the Commission's Universal Licensing System database will be updated, accordingly, to protect the new Federal assignment and the list in paragraph (b) of this section will be updated as soon as practicable.

[64 FR 66410, Nov. 26, 1999, as amended at 69 FR 46443, Aug. 3, 2004]

### § 90.373 Eligibility in the DSRCS.

The following entities are eligible to hold an authorization to operate Roadside units in the DSRCS:

(a) Any territory, possession, state, city, county, town or similar governmental entity.

(b) Any entity meeting the eligibility requirements of §§ 90.33 or 90.35.

[69 FR 46443, Aug. 3, 2004]

### § 90.375 RSU license areas, communication zones and registrations

(a) DSRCS Roadside Units (RSUs) in the 5850–5925 MHz band are licensed on the basis of non-exclusive geographic areas. Governmental applicants will be issued a geographic area license based on the geo-political area encompassing the legal jurisdiction of the entity. All other applicants will be issued a geographic area license for their proposed area of operation based on county(s), state(s) or nationwide.

(b) Applicants who are approved in accordance with FCC Form 601 will be granted non-exclusive licenses for all non-reserved DSRCS frequencies (*see* § 90.377). Such licenses serve as a prerequisite of registering individual RSUs located within the licensed geographic area described in paragraph (a) of this section. Licensees must register each RSU in the Universal Licensing System (ULS) before operating such RSU. RSU registrations are subject, *inter alia*, to the requirements of § 1.923 of this chapter as applicable (antenna structure registration, environmental concerns, international coordination, and quiet zones). Additionally, RSUs at locations subject to NTIA coordination (*see* § 90.371(b) may not begin operation until NTIA -approval is received. Registrations are not effective until the Commission posts them on the ULS.

(c) Licensees must operate each RSU in accordance with the Commission's Rules and the registration data posted on the ULS for such RSU. Licensees must register each RSU for the smallest communication zone needed (for the DSRC-based intelligent transportation systems application) using one of the following four communication zones:

| RSU class | Max. output power (dBm) [1] | Communications zone (meters) |
|---|---|---|
| A | 0 | 15 |
| B | 10 | 100 |
| C | 20 | 400 |
| D | 28.8 | 1000 |

[1] The ASTM-DSRC Standard is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 and approved by The Director of the Federal Register. Copies may be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554 or National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*. Copies of the ASTM E2213–03 DSRC Standard can be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428–2959. Copies may also be obtained from ASTM via the Internet at *http://www.astm.org*. The ASTM-DSRC Standard limits output power to 28.8 dBm but allows more power to overcome cable losses to the antenna as long as the antenna input power does not exceed 28.8 dBm and the EIRP does not exceed 44.8 dBm. However, specific channels and categories of uses have additional limitations under the ASTM-DSRC Standard.

[69 FR 46444, Aug. 3, 2004]

### § 90.377 Frequencies available; maximum EIRP and antenna height, and priority communications.

(a) Licensees shall transmit only the power (EIRP) needed to communicate with an On-Board Unit (OBU) within the communications zone and must take steps to limit the Roadside Unit (RSU) signal within the zone to the maximum extent practicable.

(b) Frequencies available for assignment to eligible applicants within the 5850–5925 MHz band for RSUs and the maximum EIRP permitted for an RSU with an antenna height not exceeding 8 meters above the roadway bed surface are specified in the table below. Where two EIRP limits are given, the higher limit is permitted only for state or local governmental entities.

| Channel No. | Frequency range (MHz) | Max. EIRP [1] (dBm) | Channel use |
|---|---|---|---|
| 170 | 5850–5855 | ..... | Reserved. |
| 172 | 5855–5865 | 33 | Service Channel.[2] |
| 174 | 5865–5875 | 33 | Service Channel. |
| 175 | 5865–5885 | 23 | Service Channel.[3] |
| 176 | 5875–5885 | 33 | Service Channel. |
| 178 | 5885–5895 | 33/44.8 | Control Channel. |
| 180 | 5895–5905 | 23 | Service Channel. |
| 181 | 5895–5915 | 23 | Service Channel.[3] |
| 182 | 5905–5915 | 23 | Service Channel. |